10-649298 Page 2

```
chain nodes :
10 11 12 13 14 23 24 26
                            27
                                28 30 31 32
ring nodes :
1 2 3 4 5 6 7 8 9 16
                           17 18 19
                                      20 21
chain bonds :
4-10 5-11 8-31 9-30 11-12 11-13 13-14 14-18 16-27 17-28 19-23 20-24
21-26 31-32
ring bonds :
1-2 1-6 2-3 2-7 3-4 3-9 4-5 5-6 7-8 8-9 16-17 16-21 17-18 18-19 19-20
20-21
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 4-10 5-6 9-30 11-12 11-13 13-14 16-27 17-28 19-23
20-24 21-26
exact bonds :
2-7 3-9 5-11 7-8 8-9 8-31 14-18 31-32
normalized bonds :
16-17 16-21 17-18 18-19 19-20 20-21
isolated ring systems :
containing 1 :
```

G1:H,Cl,Br,F,CN,NO2,C

G2:C,H

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 23:CLASS 24:CLASS 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS

L3 STRUCTURE UPLOADED

=> d

L3 HAS NO ANSWERS

L3 STR

G1 H,Cl,Br,F,CN,NO2,C G2 C,H

Structure attributes must be viewed using STN Express query preparation.

=> s 13 ful

FULL SEARCH INITIATED 09:02:21 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1294 TO ITERATE

100.0% PROCESSED 1294 ITERATIONS

14 ANSWERS

SEARCH TIME: 00.00.01

L4 14 SEA SSS FUL L3

=> fil caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST 155.42 312.31

FILE 'CAPLUS' ENTERED AT 09:02:24 ON 03 SEP 2004
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FILE COVERS 1907 - 3 Sep 2004 VOL 141 ISS 11

FILE LAST UPDATED: 2 Sep 2004 (20040902/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 14

L5 3 L4

=> d ibib abs hitstr tot

L5 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS ON STN
ACCESSION NUMBER: 2004:203665 CAPLUS
DOCUMENT NUMBER: 1401:229446 Method using beterocyclic carboxamide compounds for preventing or treating atherosclerosis or restenosis Wathen, Michael W.; Wathen, Lynne K.
PATENT ASSIGNEE(S): Pharmacia & Upjohn Company, USA
SOURCE: CODEN: PIXXD2
DOCUMENT TYPE: Patent DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: Patent English

OTHER SOURCE(S): MARPAT 140:229446

AB The invention provides a method of treating atherosclerosis or restenosis in a mammal which comprises administering an effective amount of a thieno(2,3-b)pyridine carboxamide derivative or a pyrrolo(3,2,1-i)] quinoline carboxamide derivative or 292143-78-3 292143-78-2 292143-88-3 292143-94-3 292144-00-4 292144-31-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (heterocyclic carboxamide compds. for preventing or treating atherosclerosis or restenosis)

RN 292143-78-3 CAPLUS

CN Thieno(2,3-b)pyridine-5-carboxamide, N-[(4-chlorophenyl)methyl]-7-ethyl-4,7-dihydro-2-(3-hydroxypropyl)-4-oxo-(9CI) (CA INDEX NAME)

ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN L5

292144-00-4 CAPLUS Thieno[2,3-b]pyridine-5-carboxamide, N-[(4-chlorophenyl)methyl]-4,7-dihydro-2-(3-hydroxypropyl)-7-(1-methylethyl)-4-oxo- (9CI) (CA INDEX

292144-31-1 CAPLUS
Thieno[2,3-b]pyridine-5-carboxamide, N-[(4-chlorophenyl)methyl]-7-[2-(diethylamino)ethyl]-4,7-dihydro-2-(3-hydroxypropyl)-4-oxo- [9CI) (CAINDEX NAME)

C1
$$CH_2-NH-C$$
 $CH_2-CH_2-CH_2$ $CH_2)_3-OH$

REFERENCE COUNT:

FORMAT

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L5 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

292143-85-2 CAPLUS
Thieno[2,3-b]pyridine-5-carboxamide, N-{(4-chlorophenyl)methyl]-7-ethyl-4,7-dihydro-2-(4-hydroxybutyl)-4-oxo- (9C1) (CA INDEX NAME)

292143-86-3 CAPLUS
Thieno(2,3-b]pyridine-5-carboxamide, N-[(4-chlorophenyl)methyl]-4,7dydro-7-(2-hydroxyethyl)-2-(3-hydroxypropyl)-4-oxo-(9CI) (CA INDEX NAME)

292143-94-3 CAPLUS
Thieno[2,3-b]pyridine-5-carboxamide, N-[(4-chlorophenyl)methyl]-4,7dihydro-2-(3-hydroxypropyl)-7-methyl-4-oxo- (9C1) (CA INDEX NAME)

L5 ANSWER 2 OF 3
ACCESSION NUMBER: 2000:646018 CAPLUS
DOCUMENT NUMBER: 133:222607
TITLE: Preparation of
4-0X0-4,7-dihydro-thieno(2,3-b)pyridine-5-carboxamides as antiviral agents
SCHURCE: SCHURCE (S): Schurce, Mark E.; Cudahy, Michele M.; Scott, Allen
PATENT ASSIGNEE(S): PATENT ASSIGNEE(S): PATENT ASSIGNEE(S): CODEN: PIXXD2

CODEN: PIXXD2

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE AT 226208 JP 2002539130 ES 2184705 AU 759875 A5 A1 B2 AU 2000035162 US 2002006937 20020117 US 2001-824334 20010402 US 6495683 ZA 2001007255 20021217 20010831 ZA 2001-7255 NO 2001004363 20011108 NO 2001-4363 US 1999-123660P 20010907 P 19990309 PRIORITY APPLN. INFO.:

US 2000-521027

wo 2000-US5937

A3 20000307

w 20000307

OTHER SOURCE(S): MARPAT 133:222607

(Continued)

(Continued) ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

The title compds. [I; R1 = C1, Br, CN, etc.; R2 = H, R5, NR7R8, etc.; R3

H, halo, aryl, etc.; R4 = H, halo, alkyl, etc.; R5 = heterocyclyl bound via a carbon atom, (un)saturated (un)substituted alkyl, (un)saturated (un)substituted cycloalkyl, etc.; R7, R8 = H, aryl, (un)saturated (un)substituted alkyl, NR7R8 form a heterocyclyl) and their pharmaceutically acceptable salts, useful in preventing or treating a herpesvirus infection, were prepared Thus, reacting Et 4-hydroxythieno[2,3-b]pyridine-5-carboxylate with 4-chlorobenzylamine afforded 45% I [R1 = C1;

R2 = H; R3, R4 = H] which showed IC50 of 28.9 μM against HCMV

RZ = H; R3, R4 = H; Which showed 1CSU polymerase. 292143-78-3P 292143-85-2P 292143-86-3P 292144-31-1P 292144-31-1P

292144-31-19
292144-31-19
RL: BAC (Biological activity or effector, except adverse); BSU
(Biological
study, unclassified); SFN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of
4-0x0-4,7-dihydro-thieno[2,3-b]pyridine-5-carboxamides as
antivital agents)
RN 292143-78-3 CAPILIS
CN Thieno[2,3-b]pyridine-5-carboxamide, N-{(4-chlorophenyl)methyl}-7-ethyl4,7-dihydro-2-(3-hydroxypropyl)-4-0x0- (9CI) (CA INDEX NAME)

292143-85-2 CAPLUS Thieno[2,3-b]pyridine-5-carboxamide, N-[(4-chlorophenyl)methyl]-7-ethyl-4,7-dihydro-2-(4-hydroxybutyl)-4-oxo-(9CI) (CA INDEX NAME)

L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

292143-86-3 CAPLUS
Thieno[2,3-b]pyridine-5-carboxamide, N-[(4-chlorophenyl)methyl]-4,7dihydro-7-(2-hydroxyethyl)-2-(3-hydroxypropyl)-4-oxo-(9CI) (CA INDEX NAME)

292143-88-5 CAPLUS Thieno[2,3-b]pyridine-5-carboxamide, N-{(4-chlorophenyl)methyl}-7-{2-(diethylamino)ethyl}-4,7-dihydro-2-(3-hydroxypropyl)-4-oxo-, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{C1} \\ \text{CH}_2\text{-NH-C} \\ \text{Et}_2\text{N-CH}_2\text{-CH}_2 \end{array}$$

• HC1

292143-94-3 CAPLUS

Thieno (2, 3-b)pyridine-5-carboxamide, N-[(4-chlorophenyl)methyl]-4,7-dihydro-2-(3-hydroxypropyl)-7-methyl-4-oxo- (9CI) (CA INDEX NAME)

L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

292144-00-4 CAPLUS
Thieno[2,3-b]pyridine-5-carboxamide, N-[(4-chlorophenyl)methyl]-4,7-dihydro-2-(3-hydroxypropyl)-7-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

292144-31-1 CAPLUS
Thieno[2,3-b]pyridine-5-carboxamide, N-[(4-chlorophenyl)methyl]-7-[2-(diethylamino)ethyl]-4,7-dihydro-2-(3-hydroxypropyl)-4-oxo- (9CI) (CA INDEX NAME)

L5 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
1991:632279 CAPLUS
TITLE:
115:232279 CAPLUS
115:2322

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.				KIND		DATE		APPLICATION NO.			DATE					
EP	44356				Al	•	1991	0828	EP	1	991-	102	513			19910221
EP	44356	8			В1		1996	0612								
	R:	AT.	BE.	CH,	DE.	DK.	ES.	FR.	GB, G	R.	IT.	LI	. LU.	NL.	SE	3
CA	20366			,	AA			0823					6618			19910219
CA	20366	18			С		2002	1029								
JP	07061	986			A2		1995	0307	JP	1	991-	272	73			19910221
JP	30357	45			B2		2000	0424								
AT	13923	3			E		1996	0615	AT	1	991-	102	513			19910221
US	52846	61			A		1994	0208	US	1	993-	473	68			19930419
PRIORITY	APPL	N.	INFO	.:					JP	1	990-	421	25	1	Ą	19900222
									JP	1	991-	395	8	ı	ą.	19910117
									us	1	91-	657	051	1	31	19910219

OTHER SOURCE(S):

MARPAT 115:232279

ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
Title compds. [I; Rl, R2 = H, halo, cyano, NO2, acylamino, (substituted)
hydrocarbyl; R3 = H, (substituted) alkyl, alkenyl, COX; X = H, alkoxy, OH,

halo, amino; R4 = H, halo, NO2; R5 = residue capable of forming an anion or convertible to an anion; R6 = H, (substituted) alkyl, alkenyl; R7 = (substituted) hydrocarbyl; A = bond, spacer group; n = 1,2; W = CR3:CR6, NR7CO), were prepared Thus, Rt Z-ethyl-4-hydroxythieno(2,3-b)pyridine-5-carboxylate, 4-(2'-cyanophenyl)benzyl chloride, and K2CO3 were stirred at 90° for 2 h to give 60% coupling product, which was stirred with NaN3 and NH4C1 in DMF at 110° to give 13% title compound II. Several I at 30 mg/kg orally in rats inhibited the pressor response of otensin

angiotensin

II by 270%. Tablets were prepared containing II.

II by 270%. Tablets were prepared containing II.

II 137069-72-89 137069-83-1P 137069-84-2P
137069-85-3P 137069-86-4P 137069-88-6P
137069-89-7P
RL: BBC (Biological activity or effector, except adverse); BSU
(Biological

137069-83-1 CAPLUS Thieno[2,3-b]pyridine-5-carboxamide, 2-ethyl-N-[(4-fluorophenyl)methyl]-4,7-dihydro-4-oxo-7-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-(9CI) (CA INDEX NAME)

ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

 $\label{local-problem} \begin{tabular}{ll} 137069-86-4 & CAPLUS \\ Thieno(2,3-b]pyridine-5-carboxamide, 2-ethyl-N-[(2-fluorophenyl)methyl]-4,7-dihydro-4-oxo-7-[[2'-{lH-tetrazol-5-yl}{1,1'-biphenyl}-4-yl]methyl]-(9CI) & (CA INDEX NAME) \\ \end{tabular}$

137069-88-6 CAPLUS
Thieno[2,3-b]pyridine-5-carboxamide, 2-ethyl-4,7-dihydro-N-[(4-methyl)penyl)methyl]-4-oxo-7-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]- [9CI] (CA INDEX NAME)

L5 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

137069-85-3 CAPLUS
Thieno[2,3-b]pyridine-5-carboxamide, 2-ethyl-4,7-dihydro-4-oxo-N-{1-phenylethyl}-7-{[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl}- (9CI) (CA INDEX NAME)

L5 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

137069-89-7 CAPLUS
Thieno[2,3-b]pyridine-5-carboxamide, 2-ethyl-4,7-dihydro-N-[(2-methylphenyl)methyl]-4-oxo-7-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)